

LECTOTYPIFICATION OF *SENECIO NEOMEXICANUS* A. GRAY

Billie L. Turner

Department of Botany, University of Texas, Austin, Texas 78713-7640 U.S.A.

ABSTRACT

Senecio neomezicanus A. Gray is lectotypified.

KEY WORDS: *Senecio*, Asteraceae

The name *Senecio neomezicanus* A. Gray was first proposed in 1883 without description. Gray, nevertheless, noted that the name was "given to a troublesome species, collected in New Mexico by *Wright, Thurber, Henry, Greene*, etc., in Arizona recently by *Lemmon* and *Pringle*, and within the borders of California by *Parish*, specimens of which have been variously and dubiously referred to *S. fendleri, multilobatus, aureus*, etc." Gray subsequently formally described the species, noting in his protologue that it occurred in "Mountains and wooded hills of New Mexico, *Fendler, Wright, Thurber, Henry, Greene*, etc. Arizona, *Lemmon, Pringle*. San Bernardino, mountains, California, *Parish*."

Barkley (1978) listed as the "holotype" of *Senecio neomezicanus*, as *Wright 1415* (GH) from the Organ Mountains of New Mexico, collected in 1852. He presumably followed Greenman (1915) in this designation, although the latter worker did not formally designate the sheet concerned as "holotype," but rather noted this to be a "type," sheets of which could be found at both GH and PH. In view of this ambiguity, designation of a formal lectotype is needed, which is the purpose of the present paper.

Gray did not originally annotate *Wright 1415* (GH) as *Senecio neomezicanus*, but rather noted on the original label that this was *Senecio aureus* L. var. *borealis* A. Gray, and subsequently stating "verging towards a stout and floccose form of var. *Balsamitae* (*S. plattensis* Nutt.)" (Gray 1852, p. 100). Later, Gray apparently wrote on the label which accompanies *Wright 1415*, "positus *S. Neomezicanus*." Indeed, the plant concerned (cf. Greenman 1918, pl. 4) does not fit well Gray's description of *S. neomezicanus*, looking instead like (or approaching) *S. plattensis*, if not what I would call *S. thurberi* A. Gray.

Among the various paratypes available at GH!, a better selection for lectotypification of *Senecio neomexicanus* is *Lemmon 49* from the Santa Catalina Mountains, Arizona, which is annotated "*S. Neo-Mexicanus* n-sp." in Gray's hand.

Senecio neomexicanus A. Gray, *Syn. Fl. N. Amer.* 1(2):392. 1884. TYPE: U.S.A. Arizona: Pima Co., Santa Catalina Mountains, Apr 1880, *J.G. Lemmon 49* (LECTOTYPE [selected here]: GH!). On the type sheet there is mounted *Lemmon 122*, from Ft. Lowell, Arizona; the plant is virtually identical with *Lemmon 49*, and both occur within the range of the species. Barkley annotated both specimens as belonging to his concept of *S. neomexicanus* var. *neomexicanus*.

My interpretation of what Gray had in mind when he described *Senecio neomexicanus* is essentially that of Barkley's *S. neomexicanus* var. *neomexicanus*, except that Barkley (1978) included as a questionable synonym the earliest name within this complex, *S. thurberi* A. Gray. I believe that the latter name does not belong within the *S. neomexicanus* complex, but rather applies to what Barkley calls *Senecio tridenticulatus* Rydb. (including much of his *S. neomexicanus* var. *mutabilis* [E. Greene] T.M. Barkley, which is typified by material from Colorado). In short, I consider *Senecio tridenticulatus*, *S. neomexicanus* var. *mutabilis*, *S. neomexicanus* var. *metcalfei* (E. Greene) T.M. Barkley, and *S. neomexicanus* var. *toumeyii* (E. Greene) T.M. Barkley to be synonymous with *S. thurberi*.

Preliminary field studies during the spring and summer of 1993 in southwestern New Mexico and Arizona, along with examination of most of the types concerned, suggest that *Senecio neomexicanus* var. *neomexicanus* ranges across most of southern Arizona and adjacent southeastern New Mexico; *Senecio thurberi* ranges across much of northern Arizona, closely adjacent Utah, Colorado, and most of New Mexico and trans-Pecos Texas.

Whether or not my taxonomic views with respect to the above are sound, the lectotypification provided here for *Senecio neomexicanus* appears appropriate and needed if future workers hope to stabilize the nomenclature among members of the *S. neomexicanus* - *S. thurberi* complex.

ACKNOWLEDGMENTS

My considerable thanks to Ted Barkley and Guy Nesom for reviewing this paper.

LITERATURE CITED

- Barkley, T.M. 1978. *Senecio*, in N. Amer. Fl. II. 10:50-139.
- Gray A. 1852. *Plantae Wrightianae* 2:1-117.
- . 1883. Proc. Amer. Acad. Arts. 19:55.
- Greenman, J.M. 1918. Monograph of the North and Central American Species of the genus *Senecio* - part II. Ann. Missouri Bot. Gard. 5:37-108.